

1. (Amended Three Times) A humanized immunoglobulin or antigen-binding fragment thereof having binding specificity for  $\alpha 4\beta 7$  integrin, said immunoglobulin or fragment comprising an antigen binding region of nonhuman origin and at least a portion of an immunoglobulin of human origin, said antigen binding region comprising at least one of three complementarity determining regions (CDR1, CDR2 and CDR3) of a light chain variable region and at least one of three complementarity determining regions (CDR1, CDR2 and CDR3) of a heavy chain variable region of the amino acid sequence set forth below or an amino acid sequence substantially the same as said amino acid sequence such that the antibody specifically binds to the  $\alpha 4\beta 7$  integrin:

light chain: CDR1 amino acids 44-59 of SEQ ID NO: 12  
CDR2 amino acids 75-81 of SEQ ID NO: 12  
CDR3 amino acids 114-122 of SEQ ID NO: 12  
heavy chain: CDR1 amino acids 50-54 of SEQ ID NO: 15  
CDR2 amino acids 69-85 of SEQ ID NO: 15  
CDR3 amino acids 118-129 of SEQ ID NO: 15.

2. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 1, wherein the portion of an immunoglobulin of human origin is derived from a human constant region.
3. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 2 wherein the human constant region is of the gamma type.
4. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 2 wherein the antigen binding region is of rodent origin.
5. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 2 wherein the antigen binding region is derived from Act-1 monoclonal antibody.

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6. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 1 wherein the antigen binding region comprises a complementarity determining region of rodent origin, and the portion of an immunoglobulin of human origin is derived from a human framework region.
7. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 6, wherein the complementarity determining region is derived from Act-1 monoclonal antibody.

8.

(Amended Three Times) A humanized immunoglobulin or antigen-binding fragment thereof having binding specificity for  $\alpha 4\beta 7$  integrin comprising a heavy chain and a light chain,

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the light chain comprising complementarity determining regions derived from an antibody of nonhuman origin which binds  $\alpha 4\beta 7$  and a framework region derived from a light chain of human origin, wherein each of said complementarity regions (CDR1, CDR2 and CDR3) has the amino acid sequence set forth below or an amino acid sequence substantially the same as said amino acid sequence such that the [antibody] immunoglobulin or fragment specifically binds to the  $\alpha 4\beta 7$  integrin:

light chain: CDR1 amino acids 44-59 of SEQ ID NO: 12  
CDR2 amino acids 75-81 of SEQ ID NO: 12  
CDR3 amino acids 114-122 of SEQ ID NO: 12; and

the heavy chain comprising complementarity determining regions derived from an antibody of nonhuman origin which binds  $\alpha 4\beta 7$  and a framework region derived from a heavy chain of human origin, wherein each of said complementarity regions (CDR1, CDR2 and CDR3) has the amino acid sequence set forth below or an amino acid sequence substantially the same as said amino acid sequence such that the [antibody] immunoglobulin or fragment specifically binds to the  $\alpha 4\beta 7$  integrin:

heavy chain: CDR1 amino acids 50-54 of SEQ ID NO: 15  
CDR2 amino acids 69-85 of SEQ ID NO: 15  
CDR3 amino acids 118-129 of SEQ ID NO: 15.

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9. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 8 wherein said immunoglobulin can compete with murine Act-1 for binding to  $\alpha 4\beta 7$ .

11. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 8 wherein the light chain of human origin is the light chain of the GM607'CL antibody.

12. (Amended) The humanized immunoglobulin or antigen-binding fragment of Claim 8 wherein the heavy chain of human origin is the heavy chain of the human 21/28'CL antibody.

13. (Amended Three Times) A humanized immunoglobulin light chain or fragment thereof comprising CDR1, CDR2 and CDR3 of the light chain of murine Act-1 antibody, and a human light chain framework region, said complementarity determining regions comprising the amino acid sequence set forth below or an amino acid sequence substantially the same as said amino acid sequence such that [the] an antibody comprising said light chain or fragment thereof specifically binds to the  $\alpha 4\beta 7$  integrin:

light chain: CDR1 amino acids 44-59 of SEQ ID NO: 12  
CDR2 amino acids 75-81 of SEQ ID NO: 12  
CDR3 amino acids 114-122 of SEQ ID NO: 12.

14. (Amended) The humanized immunoglobulin light chain or fragment thereof of Claim 13 wherein the human framework region is derived from the light chain of the GM607'CL antibody.

15. (Amended) The humanized immunoglobulin light chain or fragment thereof of Claim 14 comprising the variable region of SEQ ID NO: 21.

18. (Amended Three Times) A humanized immunoglobulin heavy chain or fragment thereof comprising CDR1, CDR2 and CDR3 of the heavy chain of the Act-1 antibody, and a human heavy chain framework region, said complementarity determining regions comprising the amino acid sequence set forth below or an amino acid sequence